

CLAIMS

1. (Amended) An ultrasonic probe, comprising: an ultrasonic element unit for transmitting and receiving an ultrasonic wave while carrying out ultrasonic scanning; a storage portion for storing the ultrasonic element unit; and an acoustic medium liquid charged in the storage portion,

wherein the ultrasonic element unit includes a rotating mechanism portion stored in the storage portion, the rotating mechanism portion being a spontaneous rotation type motor whose rotation is induced magnetically and being supported by an elastic supporting member, and

the storage portion is sealed by the supporting member in a liquid-tight state.

2. The ultrasonic probe according to claim 1, wherein the supporting member is made of rubber.

3. The ultrasonic probe according to claim 1, further comprising pressurizing means for pressurizing the acoustic medium liquid so as to form a positive pressure in the storage portion.

4. The ultrasonic probe according to claim 3, wherein the pressurizing means is a syringe pump including a cylinder connected with the storage portion so as to allow the acoustic medium liquid to flow between the cylinder and the storage portion, and a piston arranged in the cylinder.

5. The ultrasonic probe according to claim 4, wherein the cylinder is sealed by the piston in a liquid-tight state.

6. The ultrasonic probe according to claim 1, further comprising a reservoir connected with the storage portion so as to allow the acoustic medium liquid

to flow between the reservoir and the storage portion.

7. The ultrasonic probe according to claim 6, wherein the reservoir is an elastic container with concavities.

8. (Added) The ultrasonic probe according to claim 1, further comprising a reservoir that is an elastic container provided so as to allow the acoustic medium liquid to flow between the container and the storage portion,
wherein a volumetric capacity of the reservoir is changed due to deformation of the container in preference to stretching of a material.